

## AMENDMENTS TO THE CLAIMS

1           1.       (Currently Amended) A computer system for performing expedited startup  
2 operations, comprising:  
3           a processor;  
4           a system startup memory coupled to the processor;  
5           a basic input/output system (BIOS) memory coupled to the processor, the BIOS memory  
6 comprising instructions for initiating startup operations; and  
7           a hard disk drive storage device, comprising  
8                 a storage media comprising at least one drive platter for storing a program module  
9 that is loaded in the system startup memory during startup operations,  
10                 a non-volatile cache memory for storing a copy of the program module stored on  
11 the storage media, and  
12                 a microcontroller for controlling access to the storage media and the non-volatile  
13 cache memory, said microcontroller configured to retrieve the program module from the  
14 non-volatile cache memory in response to a read request from the processor if the storage  
15 media is not operational when the read request is received by the hard disk drive storage  
16 device.

1           2.       (Cancelled).

1           3.       (Currently Amended) The computer system of claim 1 [[2]], where the cache  
2 memory comprises a battery-backed CMOS memory.

1           4.       (Original)     The computer system of claim 1, where the program module  
2 comprises an initial program load module that is loaded into the system startup memory and  
3 executed by the processor to load an operating system for the computer system.

1           5.       (Original)     The computer system of claim 4, where the initial program load  
2 module comprises a master boot record, a boot load program and a kernel program.

1           6.       (Original)     The computer system of claim 1, where the hard disk drive storage  
2 device comprises a RAID array.

1           7.       (Currently Amended) The computer system of claim 1 [[2]], where the hard disk  
2 drive storage device further comprises a microcontroller memory for storing a module that  
3 maintains coherency between the storage media and the non-volatile cache memory.

1           8.       (Original)     The computer system of claim 7, further comprising a threshold  
2 table stored in the hard disk drive storage device, said threshold table containing, for at least one  
3 sector of the storage media, a minimum threshold count value, wherein the module clears a  
4 sector in the non-volatile cache memory only if a cache miss count meets or exceeds the  
5 minimum threshold count value for that sector.

1           9.       (Currently Amended) A method for retrieving a program module from a first  
2 storage device during startup operations, comprising:  
3               executing BIOS instructions for initiating startup operations;  
4               initiating operating system load operations by requesting the [[a]] program module from  
5 the [[for a]] first hard disk drive storage device comprised of a first storage media and a non-  
6 volatile cache storage media; and  
7               retrieving said program module from the non-volatile cache storage media if the first  
8 storage media is not operational to provide said program module.

1           10.     (Currently Amended) The method of claim 9, wherein the non-volatile cache  
2 storage media comprises a cache memory.

1           11.     (Original)     The method of claim 10, where the cache memory comprises a  
2 battery-backed CMOS memory.

1           12.     (Original)     The method of claim 9, where the program module comprises an  
2 initial program load module that is loaded into a system startup memory and executed by a  
3 processor to load an operating system for a computer system.

1           13.     (Original)     The method of claim 12, where the initial program load module  
2 comprises a master boot record, a boot load program and a kernel program.

1           14.     (Currently Amended) The method of claim 9, further comprising maintaining  
2 cache coherency between at least a part of the first storage media and the non-volatile cache  
3 storage media.

1           15.     (Original)     The method of claim 9, further comprising executing the program  
2 module to load an operating system into a system memory.

1           16.     (Currently Amended) In an information handling system, a disk drive storage  
2 device, comprising:  
3           at least one drive platter for storing a program module,  
4           a non-volatile cache memory for storing a copy of the program module, and  
5           a microcontroller for controlling access to the drive platter and the non-volatile cache  
6 memory, said microcontroller configured to retrieve the program module from the non-volatile  
7 cache memory in response to a read request from a processor if the drive platter is not  
8 operational when the read request is received by the disk drive storage device.

1           17.     (Cancelled).

1           18.     (Currently Amended) The disk drive storage device of claim 16, where the non-  
2 volatile cache memory comprises a battery-backed CMOS memory.

1           19.     (Original)     The disk drive storage device of claim 16, where the program  
2 module comprises a master boot record that is loaded into a system startup memory and executed  
3 by a processor to load an operating system.

1           20.     (Currently Amended) The disk drive storage device of claim 16, where the  
2 microcontroller executes a coherence program to maintain coherency between the drive  
3 platter and the non-volatile cache memory.